

nomical Society on the 9th of November 1866, and he served on the Council in 1870-3, 1875, and 1878-80.

He latterly lived in retirement at his residence, Batch Wood, St. Albans, where he died on the 29th of April 1905, in his 89th year.

The Rev. SAMUEL JENKINS JOHNSON was the only son of the Rev. S. Johnson, and was born on the 14th of March 1845 at Atherton, in Lancashire, being descended from an old Lancashire family. He early showed a great love for astronomy, and when no more than nine years old began to collect such mentions of celestial phenomena as he could find in the Greek and Latin classics. His great delight at school was to gather his play-fellows in a corner of the playground and give them a lecture on astronomy. He decided to take orders, and with this view he matriculated at St. John's College, Oxford, where he remained for three years, when he took his degree. He was ordained deacon in 1868, and priest in 1869; in 1868 he was licensed to the curacy of West Houghton, Lancashire, and to that of Lytham in 1870. At the end of the latter year he became vicar of Upton Helions, Devon, the church of which he entirely restored. In 1879 he married Miss Mary Drew, and migrated to Abbenhall, Gloucester, where he spent a year in restoring the church; and finally, in 1882, settled at Melplash, Bridport, where the remainder of his life was spent.

Mr. Johnson was elected a Fellow of this Society on the 8th of March 1872, and between that time and the year of his death contributed no fewer than thirty-seven papers to the *Monthly Notices*. These are mostly short notes on ancient and future eclipses, or on his observations of eclipses, transits, occultations, &c. In *Monthly Notices*, vol. liv. p. 142, he published a note on the influence of the full Moon on the weather. His records, kept for fifteen years, appeared to show that there is no ground for the view held by Sir John Herschel, Humboldt, &c., that the full Moon has some effect in dissipating clouds. In 1887 he presented to the Society a large manuscript volume containing particulars of all eclipses visible in England from A.D. 538 to 2500. In 1869 he published a small work, *Eclipses and Transits in Future Years*; he was also the author of *Eclipses Past and Future* (1874) and *Historical and Future Eclipses* (1896). In 1882 he went to Marseilles to observe the transit of *Mercury* of the 6th of December; and in 1900 made a journey to Navalmoral, in Spain, where he successfully observed the total solar eclipse of the 28th of May. He published his observations, with a sketch of the corona, in *Monthly Notices*, vol. lx. p. 590.

Mr. Johnson suffered from gout, and had been for some time failing in health; this became more marked after the death of his wife in 1904. Though scarcely fit for the journey he went to Burgos, where he was successful in observing the total solar eclipse

of the 30th of August 1905. He returned about the 10th of September, and at once resumed his parochial duties. On the 4th of October he attended the Church Congress at Weymouth, but his strength was failing, and he died somewhat suddenly on the 9th of October.

His great interest in astronomy never led him to neglect his work as a clergyman. He made great improvements in his church and parish generally, and was well known among the poor for his kindly interest and warm-hearted generosity. He was attentive to his duties to the last, and only three days before his death had walked three miles over a bad road to the end of his parish. He leaves a son and a daughter, to the former of whom (Mr. S. T. Johnson) the Council are indebted for most of the particulars given in this notice.

Mr. Johnson left a small sum in trust, the income to be devoted to the continuation in various almanacs of his predictions and diagrams of eclipses and occultations.

CHARLES JASPER JOLY was the son of the Rev. J. Swift Joly, of Athlone, and was born in 1864. As a boy at Galway Grammar School he was reputed clever generally, but was not considered to have any special aptitude for the mathematical sciences ; indeed it was only as he approached maturity that his remarkable powers became apparent. In 1882 he entered Trinity College, Dublin, taking a scholarship and ultimately the mathematical studentship of his year. From Dublin he went to Berlin, and was for some time a student of experimental physics in the laboratory of Helmholtz and Koenig. In 1887, however, on the death of his father, he returned to Ireland, and read for a Trinity Fellowship, which was attained in 1894. During the years of preparation he acquired a magnificent grasp of Quaternions and of every branch of Mathematical Physics, and almost immediately after his election a succession of memoirs, broken only by his death, showed his masterly power as an investigator.

In 1897 he succeeded Dr. Rambaut as Andrews Professor of Astronomy in the University of Dublin and Royal Astronomer of Ireland ; he was elected a Fellow of the Royal Astronomical Society in 1898, and took part in the successful Spanish eclipse expedition of 1900, which was sent out by the Royal Dublin Society and the Royal Irish Academy. But his time during the four years succeeding his appointment was chiefly occupied in the gigantic task of preparing a new edition of the work on Quaternions of his great predecessor, Hamilton. A large amount of additional matter was contributed by Joly himself, and the publication of the first volume in 1899 and the second volume in 1901 created a notable revival of interest in quaternion analysis ; this was further stimulated by his own subsequent investigations, especially a memoir on *Quaternions and Projective Geometry*, which occupies over 100 pages in the *Phil. Trans.* of 1903.